



0329.65766

## PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent Application

Applicant: Schliesman et al.

Serial No. 09/941,279

Filed: August 27, 2001

For: METHOD FOR MAKING A HIGH  
SOLIDS INTERACTIVE COATING  
COMPOSITION AND INK ...

Art Unit: 1714

) I hereby certify that this paper is being deposited with  
) the United States Postal Service as FIRST-CLASS mail  
) in an envelope addressed to: Assistant Commissioner  
) for Patents, Washington, D.C. 20231, on this date.

10-12-01

Date

F-CLASS.WCM

Appr. February 20, 1998

Registration No. 40,607

Attorney for Applicant

OCT 16 2001  
RECEIVED  
GROUP 1700INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R.1.56, 1.97 and 1.98, Applicants through  
counsel herewith submit copies of the publications as set forth in the attached form PTO-  
1449 as follows:

U.S. PATENTS

| <u>DOCUMENT NO.</u> | <u>INVENTOR</u> | <u>ISSUE DATE</u> |
|---------------------|-----------------|-------------------|
| 3,298,030           | Lewis et al.    | January 10, 1967  |
| 3,415,671           | Rice            | December 10, 1968 |
| 3,523,818           | Blumenthal      | August 11, 1970   |

**FAX RECEIVED**  
OCT 19 2001  
**GROUP 1700**

| <u>DOCUMENT NO.</u> | <u>INVENTOR</u> | <u>ISSUE DATE</u>  |
|---------------------|-----------------|--------------------|
| 3,535,202           | Huang           | October 20, 1970   |
| 3,615,549           | Ohyama et al.   | October 26, 1971   |
| 3,655,527           | Curran et al.   | April 11, 1972     |
| 3,715,219           | Kurz et al.     | February 6, 1973   |
| 3,759,744           | Schliesman      | September 18, 1973 |
| 3,889,270           | Hoffmann et al. | June 10, 1975      |
| 3,966,572           | Carder          | June 29, 1976      |
| 4,102,845           | Schröder et al. | July 25, 1978      |
| 4,151,666           | Raphael et al.  | May 1, 1979        |
| 4,168,165           | Kato et al.     | September 18, 1979 |
| 4,168,338           | Kato et al.     | September 18, 1979 |
| 4,266,016           | Date et al.     | May 5, 1981        |
| 4,330,605           | Boston          | May 18, 1982       |
| 4,371,582           | Sugiyama et al. | February 1, 1983   |
| 4,425,405           | Murakami et al. | January 10, 1984   |
| 4,440,827           | Miyamoto et al. | April 3, 1984      |
| 4,446,174           | Maekawa et al.  | May 1, 1984        |
| 4,460,637           | Miyamoto et al. | July 17, 1984      |
| 4,474,847           | Schröder et al. | October 2, 1984    |

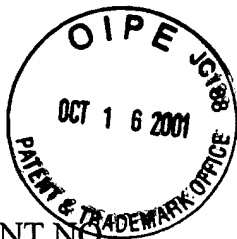
| <u>DOCUMENT NO.</u> | <u>INVENTOR</u>  | <u>ISSUE DATE</u>  |
|---------------------|------------------|--------------------|
| 4,474,850           | Burwasser        | October 2, 1984    |
| 4,474,859           | Oshima et al.    | October 2, 1984    |
| 4,478,910           | Oshima et al.    | October 23, 1984   |
| 4,490,434           | Oshima et al.    | December 25, 1984  |
| 4,542,059           | Togano et al.    | September 17, 1985 |
| 4,554,181           | Cousin et al.    | November 19, 1985  |
| 4,564,560           | Tani et al.      | January 14, 1986   |
| 4,576,867           | Miyamoto         | March 18, 1986     |
| 4,620,197           | Miyamoto et al.  | October 28, 1986   |
| 4,636,409           | Arai et al.      | January 13, 1987   |
| 4,642,654           | Togano et al.    | February 10, 1987  |
| 4,732,786           | Patterson et al. | March 22, 1988     |
| 4,743,507           | Franses et al.   | May 10, 1988       |
| 4,758,461           | Akiya et al.     | July 19, 1988      |
| 4,780,356           | Otsuma et al.    | October 25, 1988   |
| 4,792,487           | Schubring et al. | December 20, 1988  |
| 4,877,678           | Hasegawa et al.  | October 31, 1989   |
| 4,877,686           | Riou et al.      | October 31, 1989   |
| 4,879,166           | Misuda et al.    | November 7, 1989   |

**FAX RECEIVED**  
 OCT 9 2001  
 COURTESY

| <u>DOCUMENT NO.</u> | <u>INVENTOR</u>    | <u>ISSUE DATE</u> |
|---------------------|--------------------|-------------------|
| 4,892,787           | Kruse et al.       | January 9, 1990   |
| 4,900,620           | Tokita et al.      | February 13, 1990 |
| 4,902,568           | Morohoshi          | February 20, 1990 |
| 4,915,923           | Ogawa et al.       | April 10, 1990    |
| 4,931,810           | Iwata et al.       | June 5, 1990      |
| 5,013,603           | Ogawa et al.       | May 7, 1991       |
| 5,041,328           | Akiya et al.       | August 20, 1991   |
| 5,057,570           | Miller et al.      | October 15, 1991  |
| 5,081,470           | Kurabayashi et al. | January 14, 1992  |
| 5,124,201           | Kurabayashi et al. | June 23, 1992     |
| 5,180,624           | Kojima et al.      | January 19, 1993  |
| 5,213,873           | Yasuda et al.      | May 25, 1993      |
| 5,266,397           | Ogawa et al.       | November 30, 1993 |
| 5,270,103           | Oliver et al.      | December 14, 1993 |
| 5,279,885           | Ohmori et al.      | January 18, 1994  |
| 5,302,437           | Idei et al.        | April 12, 1994    |
| 5,314,747           | Malhotra et al.    | May 24, 1994      |
| 5,320,897           | Kondo et al.       | June 14, 1994     |
| 5397,619            | Kuroyama et al.    | March 14, 1995    |

| <u>DOCUMENT NO.</u> | <u>INVENTOR</u>    | <u>ISSUE DATE</u> |
|---------------------|--------------------|-------------------|
| 5,437,925           | Macaulay et al.    | August 1, 1995    |
| 5,459,502           | Sakaki et al.      | October 17, 1995  |
| 5,463,178           | Suzuki et al.      | October 31, 1995  |
| 5,472,757           | Ogawa et al.       | December 5, 1995  |
| 5,478,631           | Kawano et al.      | December 26, 1995 |
| 5,605,750           | Romano et al.      | February 25, 1997 |
| 5,660,622           | Nikoloff           | August 26, 1997   |
| 5,660,928           | Stokes et al.      | August 26, 1997   |
| 5,700,582           | Sargeant et al.    | December 23, 1997 |
| 5,702,804           | Malhotra           | December 30, 1997 |
| 5,709,976           | Malhotra           | January 20, 1998  |
| 5,725,946           | Fukushima et al.   | March 10, 1998    |
| 5,747,146           | Kashiwazaki et al. | May 5, 1998       |
| 5,755,929           | Kuroyama et al.    | May 26, 1998      |
| 5,798,173           | Momma et al.       | August 25, 1998   |
| 5,846,647           | Yoshino et al.     | December 8, 1998  |
| 5,851,654           | Yoshino et al.     | December 22, 1998 |
| 5,856,001           | Okumura et al.     | January 5, 1999   |
| 5,856,023           | Chen et al.        | January 5, 1999   |

| <u>DOCUMENT NO.</u> | <u>INVENTOR</u> | <u>ISSUE DATE</u> |
|---------------------|-----------------|-------------------|
| 5,863,648           | Ohmura et al.   | January 26, 1999  |
| 5,866,268           | Sargeant et al. | February 2, 1999  |
| 5,869,177           | Yoshino et al.  | February 9, 1999  |
| 5,882,388           | Adair et al.    | March 16, 1999    |
| 5,882,396           | Hiorns          | March 16, 1999    |
| 5,882,754           | Kuroyama et al. | March 16, 1999    |
| 5,882,755           | Igarashi et al. | March 16, 1999    |
| 5,888,635           | Yang et al.     | March 30, 1999    |
| 5,897,961           | Malhotra et al. | April 27, 1999    |
| 5,916,673           | Fryberg et al.  | June 29, 1999     |
| 5,928,765           | Malhotra        | July 27, 1999     |
| 5,928,787           | Owatari et al.  | July 27, 1999     |
| 5,928,988           | Yamane et al.   | July 27, 1999     |
| 5,942,335           | Chen et al.     | August 24, 1999   |
| 5,962,128           | Kuroyama        | October 5, 1999   |
| 5,965,244           | Tang et al.     | October 12, 1999  |
| 5,985,424           | DeMatte et al.  | November 16, 1999 |
| 6,010,790           | Chen et al.     | January 4, 2000   |
| 6,028,028           | Nitta           | February 22, 2000 |



| <u>DOCUMENT NO.</u> | <u>INVENTOR</u> | <u>ISSUE DATE</u> |
|---------------------|-----------------|-------------------|
| 6,037,050           | Saito et al.    | March 14, 2000    |
| 6,074,793           | Camp et al.     | June 13, 2000     |
| 6,165,606           | Kasahara et al. | December 26, 2000 |

### FOREIGN PATENT DOCUMENTS

| <u>DOCUMENT NO.</u>        | <u>COUNTRY</u> | <u>PUBLICATION DATE</u> |
|----------------------------|----------------|-------------------------|
| 51-47340                   | Japan          | December 14, 1976       |
| 52-74340                   | Japan          | March 15, 1977          |
| 55-051583                  | Japan          | April 15, 1980          |
| 56-148,583                 | Japan          | November 18, 1981       |
| 56-148,586                 | Japan          | November 18, 1981       |
| 57-082,085                 | Japan          | May 22, 1982            |
| 57-107878                  | Japan          | July 5, 1982            |
| 57-107,879                 | Japan          | July 5, 1982            |
| 3,151,471                  | Germany        | August 12, 1982         |
| 57-157,786                 | Japan          | September 29, 1982      |
| 58-094491                  | Japan          | June 4, 1983            |
| JP 1160674 (Abstract only) | JP             | June 23, 1989           |
| EP 439,153 A               | EPO            | July 31, 1991           |
| EP 493,100 A1              | EPO            | July 1, 1992            |

| <u>DOCUMENT NO.</u>             | <u>COUNTRY</u> | <u>PUBLICATION DATE</u> |
|---------------------------------|----------------|-------------------------|
| WO 95/00340                     | PCT            | January 5, 1995         |
| JP 8072387 (Abstract only)      | JP             | March 19, 1996          |
| 00730976/EP 81 Exemplary Claims | EPO            | September 11, 1996      |
| EP 743,193 A1                   | EPO            | November 20, 1996       |
| JP 09272257 (Abstract only)     | JP             | October 21, 1997        |
| EP 803,374 A2                   | EPO            | October 29, 1997        |
| EP 968,836 A2                   | EPO            | January 5, 2000         |
| EP 1,002,657 A1                 | EPO            | May 24, 2000            |
| EP 888,904 B1                   | EPO            | March 21, 2001          |
| GB 2,129,333 B                  | GB             | November 19, 1986       |
| GB 2,334,684 A                  | GB             | September 1, 1999       |





### OTHER PUBLICATIONS

"The Chemistry of Silica Solubility, Polymerization, Colloid and Surface Properties, and Biochemistry; Chapter 5: *Silica Gels and Powders* ." Ralph K. Iler., John Wiley & Sons; 5 (462-621) 1979.

"Stickies and Pitch Pacification White Paper Grades; Kenite®; Celite®; Harborlite®; *Technical Bulletin No. 105*." World Minerals Inc.; 1980.

"Hercon 70, 72, 75, and 78 Cationic Emulsions, The Next Generation of Alkaline Sizing Agents; *Hercules*." Hercules, Inc; December 1989.

"Development of Amorphous Silica for Ink Jet Recording Paper." Masao Takahashi, Teiji Sato and Masahide Ogawa; Research and Development Division. Mizusawa Industrial Chemicals, Ltd.; April 23, 1990.

"Lectrapel Anti-Static Agent; *Paper Chemicals Products & Services*." Calgon Corporation, Water Management Division; December 1992.

"Basoplast® 335 D." BASF Corporation; June 1994.

"Chromaset™ 600 Surface Sizing Treatment; *Hercules*." Hercules, Inc.; November 1994.

"Airvol® Polyvinyl Alcohol Typical Properties; *Air Products and Chemicals*." Air Products and Chemicals, Inc.; 1995.

"Martifin OL/107." Believed published by Martinswerk GMBH; May 1995.

"Polymer Chemicals Technical Bulletin; Air Products and Chemicals, Inc." Air Products and Chemicals, Inc.; 1996.

"Silica Pigments for ink Jet Printability." Michael C. Wilthiam. Presented at the 1996 TAPPI Coating Conference, Nashville, TN, May 21, 1996.

"Polyox® Water-Soluble Resins." Believed published by Union Carbide Corp.; believed published circa 1995.



## OTHER PUBLICATIONS

"Kirk-Othmer Encyclopedia of Chemical Technology; *Recycling, Oil to Silicon*." John Wiley & Sons; Fourth Edition; Volume 21; September 1992.

"Fluorescent Whitening Agents for Paper - CIBA-GEIGY Technical Bulletin", CIBA-GEIGY Corp., believed published circa 1995.

"Tinopal HST Liquid - CIBA-GEIGY Technical Bulletin", CIBA-GEIGY Corp., believed published circa 1995.

"Tinopal SCP Liquid - CIBA-GEIGY Technical Bulletin", CIBA-GEIGY Corp., believed published circa 1995.

"Paper Chemicals: *MSA-150 Surface Size* - Morton Water Based Polymers"; Morton Chemicals Corp., believed published circa 1995.

"Typical Chemical and Physical Properties of Silica Gel: *Davison Silica Gels*." Author and publisher are unknown; believed published circa 1995.

"UniQ-Print® 8000 Unique Printability Enhancer - Sequa Chemicals, Inc." Sequa Chemicals, Inc.; believed published circa 1995.

"Silica-Gel Coatings for Ink-Jet Media." D.M. Chapman, Ph.D. Grace Davison; believed published circa 1995.

"The Davison Family of Syloid® Silicas." Grace Davison Chemical Corp.; believed published circa 1995.

"Introduction to Silica Gel." Author and publisher are unknown; believed published circa 1995.

"Acronal® PR 8689 X", BASF Corp.; August 1995.

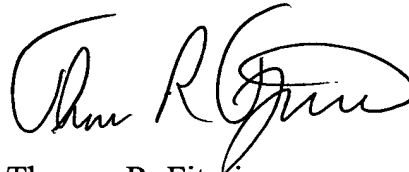
The inclusion of any reference herein shall not be considered an admission against interest in any way. For example, inclusion herein shall not be considered an admission that a reference is prior art to the present application.

Applicants respectfully request that the Examiner consider the above-listed references in the examination of this application and list these references of record in the application.

This IDS is being submitted within three months of the filing of the Application. Accordingly, it is believed that no fee is due. The Commissioner is hereby authorized to charge any additional fees that may be required in this application under 37 CFR §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069. A duplicate copy of this sheet is attached.

Respectfully submitted,  
GREER, BURNS & CRAIN, LTD.

By



Thomas R. Fitzsimons  
Registration No. 40,607

October 12, 2001  
300 South Wacker Drive  
Chicago, Illinois 60606  
Tel.: (312) 360-0080  
Fax.: (312) 360-9315  
Customer No. 24978

F:\DATA\WP60\0329\64485\IDS.DOC

Form PTO-1449 U.S. Department of Commerce  
(Rev. 8-88) Patent and Trademark Office

Attorney Docket No.: 0329.65766

Serial No.: 09/941,279

INFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)



Applicant: Schliesman et al.

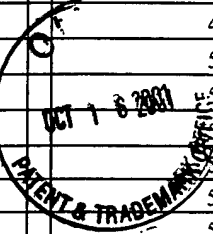
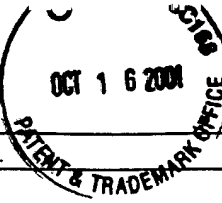
Filing Date: August 27, 2001

Group: 1714

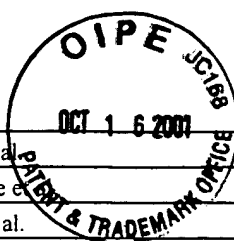
# U.S. PATENT DOCUMENTS

| Examiner Initial* | Document Number | Date        | Name             | Class | Subclass | Filing Date If Appropriate |
|-------------------|-----------------|-------------|------------------|-------|----------|----------------------------|
|                   | 3,298,030       | 01/10/1967  | Lewis et al.     |       |          |                            |
|                   | 3,415,671       | 12/10/1968  | Rice             |       |          |                            |
|                   | 3,523,818       | 08/11/1970  | Blumenthal       |       |          |                            |
|                   | 3,535,202       | 10/20/1970  | Huang            |       |          |                            |
|                   | 3,615,549       | 10/26/1971  | Ohyama et al.    |       |          |                            |
|                   | 3,655,527       | 04/11/1972  | Curran et al.    |       |          |                            |
|                   | 3,715,219       | 02/06/1973  | Kurz et al.      |       |          |                            |
|                   | 3,759,744       | 09/18/1973  | Schliesman       |       |          |                            |
|                   | 3,889,270       | 06/10/1975  | Hoffmann et al.  |       |          |                            |
|                   | 3,966,572       | 06/29/1976  | Carder           |       |          |                            |
|                   | 4,102,845       | 07/25/1978  | Schröder et al.  |       |          |                            |
|                   | 4,151,666       | 05/01/1979  | Raphael et al.   |       |          |                            |
|                   | 4,168,165       | 09/18/1979  | Kato et al.      |       |          |                            |
|                   | 4,168,338       | 09/18/1979  | Kato et al.      |       |          |                            |
|                   | 4,266,016       | 05/05/1981  | Date et al.      |       |          |                            |
|                   | 4,330,605       | 05/18/1982  | Boston           |       |          |                            |
|                   | 4,371,582       | 02/01/1983  | Sugiyama et al.  |       |          |                            |
|                   | 4,425,405       | 01/10/1984  | Murakami et al.  |       |          |                            |
|                   | 4,440,827       | 004/03/1984 | Miyamoto et al.  |       |          |                            |
|                   | 4,446,174       | 05/01/1984  | Maekawa et al.   |       |          |                            |
|                   | 4,460,637       | 07/17/1984  | Miyamoto et al.  |       |          |                            |
|                   | 4,474,847       | 10/02/1984  | Schröder et al.  |       |          |                            |
|                   | 4,474,850       | 10/02/1984  | Burwasser        |       |          |                            |
|                   | 4,474,859       | 10/02/1984  | Oshima et al.    |       |          |                            |
|                   | 4,478,910       | 10/23/1984  | Oshima et al.    |       |          |                            |
|                   | 4,490,434       | 12/25/1984  | Oshima et al.    |       |          |                            |
|                   | 4,542,059       | 09/17/1985  | Togano et al.    |       |          |                            |
|                   | 4,554,181       | 11/19/1985  | Cousin et al.    |       |          |                            |
|                   | 4,564,560       | 01/14/1986  | Tani et al.      |       |          |                            |
|                   | 4,576,867       | 03/18/1986  | Miyamoto         |       |          |                            |
|                   | 4,620,197       | 10/28/1986  | Miyamoto et al.  |       |          |                            |
|                   | 4,636,409       | 01/13/1987  | Arai et al.      |       |          |                            |
|                   | 4,642,654       | 02/10/1987  | Togano et al.    |       |          |                            |
|                   | 4,732,786       | 03/22/1989  | Patterson et al. |       |          |                            |
|                   | 4,743,507       | 05/10/1988  | Franses et al.   |       |          |                            |
|                   | 4,758,461       | 07/19/1988  | Akiya et al.     |       |          |                            |
|                   | 4,780,356       | 10/25/1988  | Otsuma et al.    |       |          |                            |
|                   | 4,792,487       | 12/20/1988  | Schubring et al. |       |          |                            |
|                   | 4,877,678       | 10/31/1989  | Hasegawa et al.  |       |          |                            |
|                   | 4,877,686       | 10/31/1989  | Riou et al.      |       |          |                            |

OCT 16 2001



|  |           |            |                    |  |  |  |
|--|-----------|------------|--------------------|--|--|--|
|  | 4,879,166 | 11/7/1989  | Misuda et al.      |  |  |  |
|  | 4,892,787 | 01/09/1990 | Kruse et al.       |  |  |  |
|  | 4,900,620 | 02/13/1990 | Tokita et al.      |  |  |  |
|  | 4,902,568 | 02/20/1990 | Morohoshi          |  |  |  |
|  | 4,915,923 | 04/10/1990 | Ogawa et al.       |  |  |  |
|  | 4,931,810 | 06/05/1990 | Iwata et al.       |  |  |  |
|  | 5,013,603 | 05/07/1991 | Ogawa et al.       |  |  |  |
|  | 5,041,328 | 08/20/1991 | Akiya et al.       |  |  |  |
|  | 5,057,570 | 10/15/1991 | Miller et al.      |  |  |  |
|  | 5,081,470 | 10/15/1991 | Kurabayashi et al. |  |  |  |
|  | 5,124,201 | 06/23/1992 | Kurabayashi et al. |  |  |  |
|  | 5,180,624 | 01/19/1993 | Kojima et al.      |  |  |  |
|  | 5,213,873 | 05/25/1993 | Yasuda et al.      |  |  |  |
|  | 5,266,397 | 11/30/1993 | Ogawa et al.       |  |  |  |
|  | 5,270,103 | 12/14/1993 | Oliver et al.      |  |  |  |
|  | 5,279,885 | 01/18/1994 | Ohmori et al.      |  |  |  |
|  | 5,302,437 | 04/12/1994 | Idei et al.        |  |  |  |
|  | 5,314,747 | 05/24/1994 | Malhotra et al.    |  |  |  |
|  | 5,320,897 | 06/14/1994 | Kondo et al.       |  |  |  |
|  | 5,397,619 | 03/14/1995 | Kuroyama et al.    |  |  |  |
|  | 5,437,925 | 08/01/1995 | Macaulay et al.    |  |  |  |
|  | 5,459,502 | 10/17/1995 | Sakaki et al.      |  |  |  |
|  | 5,463,178 | 10/31/1995 | Suzuki et al.      |  |  |  |
|  | 5,472,757 | 12/05/1995 | Ogawa et al.       |  |  |  |
|  | 5,478,631 | 12/26/1995 | Kawano et al.      |  |  |  |
|  | 5,605,750 | 02/25/1997 | Romano et al.      |  |  |  |
|  | 5,660,622 | 08/26/1997 | Nikoloff           |  |  |  |
|  | 5,660,928 | 08/26/1997 | Stokes et al.      |  |  |  |
|  | 5,700,582 | 12/23/97   | Sargeant et al.    |  |  |  |
|  | 5,702,804 | 12/30/1997 | Malhotra           |  |  |  |
|  | 5,709,976 | 01/20/1998 | Malhotra           |  |  |  |
|  | 5,725,946 | 03/10/1998 | Fukushima et al.   |  |  |  |
|  | 5,747,146 | 05/5/1998  | Kashiwazaki et al. |  |  |  |
|  | 5,755,929 | 5/26/1998  | Kuroyama et al.    |  |  |  |
|  | 5,798,173 | 08/25/1998 | Momma et al.       |  |  |  |
|  | 5,846,647 | 12/08/1998 | Yoshino et al.     |  |  |  |
|  | 5,851,654 | 12/22/1998 | Yoshino et al.     |  |  |  |
|  | 5,856,001 | 01/05/1999 | Okumura et al.     |  |  |  |
|  | 5,856,023 | 01/05/1999 | Chen et al.        |  |  |  |
|  | 5,863,648 | 01/26/1999 | Ohmura et al.      |  |  |  |
|  | 5,866,268 | 02/02/1999 | Sargeant et al.    |  |  |  |
|  | 5,869,177 | 02/09/1999 | Yoshino et al.     |  |  |  |
|  | 5,882,388 | 03/16/1999 | Adair et al.       |  |  |  |
|  | 5,882,396 | 03/16/1999 | Hiorns             |  |  |  |
|  | 5,882,754 | 03/16/1999 | Kuroyama et al.    |  |  |  |
|  | 5,882,755 | 03/16/1999 | Igarashi et al.    |  |  |  |
|  | 5,888,635 | 03/30/1999 | Yang et al.        |  |  |  |
|  | 5,897,961 | 04/27/1999 | Malhotra et al.    |  |  |  |
|  | 5,916,673 | 06/29/1999 | Fryberg et al.     |  |  |  |
|  | 5,928,765 | 07/27/1999 | Malhotra           |  |  |  |
|  | 5,928,787 | 07/27/1999 | Owatari et al.     |  |  |  |
|  | 5,928,988 | 07/27/1999 | Yamane et al.      |  |  |  |
|  | 5,942,335 | 08/24/1999 | Chen et al.        |  |  |  |
|  | 5,962,128 | 10/05/1999 | Kuroyama           |  |  |  |



|  |           |            |                 |  |  |  |
|--|-----------|------------|-----------------|--|--|--|
|  | 5,965,244 | 09/12/1999 | Tang et al.     |  |  |  |
|  | 5,985,424 | 10/16/1999 | DeMatte et al.  |  |  |  |
|  | 6,010,790 | 01/04/2000 | Chen et al.     |  |  |  |
|  | 6,028,028 | 02/22/2000 | Nitta           |  |  |  |
|  | 6,037,050 | 03/14/2000 | Saito et al.    |  |  |  |
|  | 6,074,793 | 06/13/2000 | Camp et al.     |  |  |  |
|  | 6,165,606 | 12/26/2000 | Kasahara et al. |  |  |  |

## FOREIGN PATENT DOCUMENTS

|  | Document Number                    | Date       | Country | Class | Subclass | Translation |
|--|------------------------------------|------------|---------|-------|----------|-------------|
|  | 51-47340                           | 12/14/1976 | Japan   |       |          |             |
|  | 52-74340                           | 03/15/1977 | Japan   |       |          |             |
|  | 55-051583                          | 04/15/1980 | Japan   |       |          |             |
|  | 56-148,583                         | 11/18/1981 | Japan   |       |          |             |
|  | 56-148,586                         | 11/18/1981 | Japan   |       |          |             |
|  | 56-082,085                         | 05/22/1982 | Japan   |       |          |             |
|  | 57-107878                          | 07/05/1982 | Japan   |       |          |             |
|  | 57-107,879                         | 07/05/1982 | Japan   |       |          |             |
|  | 3,151,471                          | 08/12/1982 | Germany |       |          |             |
|  | 57-157,786                         | 09/29/1982 | Japan   |       |          |             |
|  | 58-094,491                         | 06/04/1983 | Japan   |       |          |             |
|  | 2,129,333 B                        | 11/19/1986 | GB      |       |          |             |
|  | JP 1160674 (Abstract only)         | 06/23/1989 | Japan   |       |          |             |
|  | 439,153 A                          | 07/31/1991 | EPO     |       |          |             |
|  | 493,100 A1                         | 07/01/1992 | EPO     |       |          |             |
|  | WO 95/00340                        | 01/05/1995 | PCT     |       |          |             |
|  | JP 8072387 (Abstract only)         | 03/19/1996 | Japan   |       |          |             |
|  | 00730976/EP<br>81 Exemplary Claims | 09/11/1996 | EPO     |       |          |             |
|  | 743,193 A1                         | 11/20/1996 | EPO     |       |          |             |
|  | JP 09272257 (Abstract only)        | 10/21/1997 | Japan   |       |          |             |
|  | 803,374 A2                         | 10/29/1997 | EPO     |       |          |             |
|  | 2,334,684 A                        | 09/01/1999 | GB      |       |          |             |
|  | 968,836 A2                         | 01/05/2000 | EPO     |       |          |             |
|  | 1,002,657 A1                       | 05/24/2000 | EPO     |       |          |             |
|  | 888,904 B1                         | 03/21/2001 | EPO     |       |          |             |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |   |
|--|---|
|  | Ralph K. Iler. <i>Silica Gels and Powders</i> . "The Chemistry of Silica Solubility, Polymerization, Colloid and Surface Properties, and Biochemistry." Ed. John Wiley & Sons; 5 (462-621) 1979.          |
|  | <i>Technical Bulletin No. 105</i> . "Stickies and Pitch Pacification White Paper Grades; Kenite <sup>®</sup> ; Celite <sup>®</sup> ; Harborlite <sup>®</sup> ." Ed. World Minerals Inc.; 1980.            |
|  | <i>Hercules</i> . "Hercon 70, 72, 75, and 78 Cationic Emulsions, The Next Generation of Alkaline Sizing Agents." Ed. Hercules, Inc; December 1989.  |
|  | Masao Takahashi, Teiji Sato and Masahide Ogawa; Research and Development Division "Development of Amorphous Silica for Ink Jet Recording Paper." Ed. Mizusawa Industrial Chemicals, Ltd.; April 23, 1990. |
|  | <i>Paper Chemicals Products &amp; Services</i> . "Lectrapel Anti-Static Agent." Ed. Calgon Corporation, Water Management Division; December 1992.   |
|  | "Basoplast <sup>®</sup> 335 D"; BASF Corporation; June 1994.  |
|  | <i>Hercules</i> . "Chromaset <sup>™</sup> 600 Surface Sizing Treatment." Ed. Hercules, Inc.; November 1994  |
|  | <i>Air Products and Chemicals</i> . "Airvol <sup>®</sup> Polyvinyl Alcohol Typical Properties." Ed. Air Products and Chemicals, Inc. 1995.  |



|          |  |
|----------|--|
|          | Martifin OL/107; May 1995.   |
|          | "Polyox <sup>®</sup> Water-Soluble Resins".  |
|          | Micahel C. Wilthiam. "Silica Pigments for Ink-Jet Printability; Presented at the 1996 TAPPI Coating Conference, Nashville, TN, May 21, 1996. |
|          | "Kirk-Othmer Encyclopedia of Chemical Technology." Recycling, Oil to Silicon. Ed. John Wiley & Sons; Fourth Edition; Volume 21.              |
|          | CIBA-GEIGY Technical Bulletin. "Fluorescent Whitening Agents for Paper."   |
|          | CIBA-GEIGY Technical Bulletin. "Tinopal HST Liquid."   |
|          | CIBA-GEIGY Technical Bulletin. "Tinopal SCP Liquid."   |
|          | Paper Chemicals. MSA-150 Surface Size. Ed. Morton <sup>®</sup> Water Based Polymers.   |
|          | Davison Silica Gels. "Typical Chemical and Physical Properties of Silica Gel."   |
|          | "UniQ-Print <sup>®</sup> 8000 Unique Printability Enhancer" Sequa Chemicals, Inc. Ed. Sequa Chemicals, Inc.                                  |
|          | D.M. Chapman, Ph.D. "Silica-Gel Coatings for Ink-Jet Media." Ed. Grace Davison.  |
|          | "The Davison Family of Syloid <sup>®</sup> Silicas." Ed. Grace Davison Chemical.   |
|          | "Introduction to Silica Gel."  |
|          | "Acronal <sup>®</sup> PR 8689 X". Ed. BASF Corporation. August 1995.   |
| Examiner | Date Considered  |